

CLAIMS:

What is claimed is:

- 1 1. A method comprising:
2 receiving a datagram through a platform management communication channel; and
3 analyzing at least a subset of the received datagram for information necessary to identify
4 routing information of the received content.
- 1 2. A method according to claim 1, further comprising:
2 forwarding the datagram towards a destination determined from the analyzed subset of
3 the received datagram.
- 1 3. A method according to claim 1, wherein the datagram is received from a control element
2 coupled with the platform management communication channel.
- 1 4. A method according to claim 1, wherein analyzing the received content comprises:
2 identifying a source address within the routing information; and
3 selecting a destination address from a plurality of possible destination addresses based, at
4 least in part, on the identified source address.
- 1 5. A method according to claim 4, wherein the source address is a physical address privately
2 correlated with a virtual address of a control element sending the received datagram.
- 1 6. A method according to claim 1, wherein analyzing the received datagram comprises:

identifying a destination address within the received datagram; and

determining whether the identified destination address corresponds to a physical address

in a host platform management architecture.

7. A method according to claim 6, further comprising:

forwarding the datagram to the destination address denoted within the received datagram

if it is determined to be a physical address within the host platform management architecture.

8. A method according to claim 6, further comprising:

resolving a physical address from a virtual address denoted by the destination address in
the received datagram if the destination address is found to not be a physical address.

9. A method according to claim 8, further comprising:

forwarding the datagram to the physical address resolved from the destination address
denoted within the received datagram.

10. A method according to claim 1, further comprising:

limiting which of a plurality of platform management elements can communicate with a
platform management element to establish a virtual private communication channel between
such elements.

11. A method according to claim 1, wherein the routing information comprises address
information associated with the destination of the received datagram.

1 12. A method according to claim 11, wherein the routing information comprises address
2 domain information as well as a unique address identifier to uniquely identify a target of the
3 received datagram.

1 13. A storage medium comprising content which, when executed by an accessing machine,
2 cause the machine to implement a method according to claim 1.

1 14. A switching element comprising:
2 a memory element within which is stored content; and
3 a processing element, coupled with the memory element, to execute at least a subset of
4 the content to implement a method according to claim 1.

1 15. An apparatus comprising:
2 a management data structure including content; and
3 control logic, coupled with the management data structure, to compare routing
4 information in a received platform management (PM) datagram with the content in the
5 management data structure to identify one or more platform management target element(s) for
6 the received datagram.

1 16. An apparatus according to claim 15, further comprising:
2 a switching engine, responsive to the control logic, to selectively couple any of a plurality
3 of PM elements through a plurality of PM communication channels.

1 17. An apparatus according to claim 16, wherein the switching engine selectively couples the
2 plurality of PM communication channels to the control logic, to facilitate routing of datagrams
3 among and between the PM elements.

1 18. An apparatus according to claim 17, wherein the plurality of PM communication
2 channels are established within a single platform management bus.

1 19. An apparatus according to claim 18, wherein the multiple communication channels are
2 established through use of multiple address domains, detailed in the content of the management
3 data structure.

1 20. An apparatus according to claim 15, the management data structure comprising:
2 a plurality of records, one or more for at least a subset of PM elements coupled with the
3 apparatus, each of the plurality of records including one or more of an address domain field, a
4 physical address field, a physical interconnect, a virtual address field and/or a routing restrictions
5 field.

1 21. An apparatus according to claim 20, wherein the control logic identifies a target
2 element(s) by matching the routing information of the datagram to an address domain and/or a
3 physical address within the management data structure.

22. An apparatus according to claim 20, wherein the control logic identifies a target element(s) by matching the routing information of the datagram to an address domain and/or a virtual address within the management data structure.

23. An apparatus according to claim 15, wherein the apparatus is an intelligent platform management bus (IPMB) switch.

24. An apparatus according to claim 23, wherein the IPMB switch is embodied within an intelligent platform management interface (IPMI) control element.

25. An apparatus according to claim 23, wherein the IPMB switch is embodied within an integrated circuit (IC) in a server chassis.

26. An apparatus according to claim 15, wherein the plurality of communication channels are established within one or more platform management interconnect(s) across multiple servers in a server chassis.

27. A storage medium comprising content which, when executed by an accessing machine, causes the machine to implement a switching element within an platform management architecture, the switching element including a management data structure including content, and control logic, coupled with the management data structure, to compare routing information in a received platform management datagram with the content in the management data structure to identify one or more target element(s) for the received datagram.

1 28. A storage medium according to claim 27, wherein the content to implement the switching
 2 element further comprise content to selectively forward the received datagram to the identified
 3 one or more target element(s) within the PM architecture.

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1 29. A storage medium according to claim 27, wherein the content to establish the
 2 management data structure includes content to maintain one or more of address domain
 3 information, physical address information, physical interconnection identifier information,
 4 virtual address information, and/or routing restriction information for each of a plurality of IPMI
 5 elements within the IPMI architecture.

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